Preventing Venous Thromboembolism or "VTE"

Information about blood clots in veins, also known as Deep Vein Thrombosis and Pulmonary Embolism

This brochure will help you to understand:

• Deep Vein Thrombosis (blood clot in a vein) and how it can form in your body

• Pulmonary Embolus (a blood clot that has broken off and travelled to the lungs) and how it can form in your body

• What your health care team at University Health Network (UHN) will do to help prevent a blood clot from happening to you

• What you can do to help stop a blood clot from forming in your body
Why should I be worried about blood clots?

Blood clots are common. But, they may cause serious harm to the body and, may even cause death. Blood clots can happen in many people, but are most common in those who are ill or have cancer, in people who need to be in hospital or need to have surgery.

Blood clots that form in the veins in the legs and lungs are different than blood clots that form in the arteries of the body.

- Blood clots that form in the deep veins are called deep vein thrombosis or “DVT.”
- Blood clots that break off from a DVT and travel to the lungs are called pulmonary embolism or “PE.”
- Blood clots that form in the arteries and occur in different ways and can cause heart attacks, strokes or both.

Since clots in veins and arteries are different, the risk factors, prevention and treatment for each of these types of clots are also different.

This brochure will only talk about blood clots in veins (called DVT and PE).
What is Deep Vein Thrombosis (DVT)?

Deep vein thrombosis, also known as DVT, is an abnormal blood clot. If blood clots form, they usually form in the deep veins of the leg, pelvis or both. They can form in other veins in the body as well.
What is Pulmonary Embolism (PE)?

A blood clot in a deep vein can break off and travel through the bloodstream and lodge in the lungs. This travelling blood clot is called an **embolus**. This is a serious condition called **Pulmonary Embolism** or PE. A PE can cause damage to the lungs and other organs, impair oxygen supply to the body, cause pain and, can strain your heart. A PE can even cause death.

PE symptoms:

- Shortness of breath
- Chest pain that is worse when breathing in
- Coughing up blood
What are my risk factors for a DVT or PE?

There are many factors that can increase your risk of DVT and PE, including:

- Recent surgery or being hospitalized
- Major surgery
- Hip or knee replacement or other orthopedic surgery
- Cancer and most types of cancer treatments
- Major injury or bone fractures
- Pregnancy and up to 3 months after the baby is born
- Hormone replacement therapy (HRT) with estrogen
- Birth control pills (BCP) containing estrogen
- Sitting too long, especially with legs crossed
- Being confined to a bed or a wheelchair
- Age 55 years and older for DVT, 40 years old for PE
- Family history of DVT or PE, or both
- Hereditary or acquired clotting disorders that can make you more likely to develop blood clots in veins
  - For example: Factor V Leiden or Prothrombin Variant, Protein S deficiency, Protein C deficiency, and/or Antithrombin deficiency
- If you are overweight
- A central venous catheter line or a PICC line placed in a vein
What are the signs and symptoms of DVT or PE?

Symptoms of a possible DVT may include:

- Swelling of one or both legs or arm
- Pain in the calf, thigh, groin or arm
- Redness and warmth of the affected arm or leg

Symptoms of a possible PE may include all, or any of the following:

- Unexplained shortness of breath
- Sharp chest pain, especially when breathing in
- Coughing up blood
- Fever

If you have any of these symptoms, tell your doctor or nurse right away.

What is my UHN health care team doing to help prevent me from getting a DVT or PE?

Here are a few of the things we will do to help prevent a blood clot from happening to you:

- You will be assessed for risk factors for blood clots
- You may be given anticoagulants (“blood-thinning” medication) either by injection or by mouth to prevent blood clots
- If you are able, you will be asked to get out of bed and walk about frequently
- If you are having surgery, you may need to wear “sequential compression devices” (SCDs) on your legs to increase blood flow in your veins
What can I do to prevent DVT and PE?

If you are able, it is important to do as much as you can to prevent a DVT or PE from happening to you. This list will help you take part in your care if you need to come to the hospital in future or if you are in the hospital now. It also gives you some tips on preventing blood clots.

If your hospital admission has already been planned:

• Tell your health care team if you have ever had a blood clot in the past.
• Tell your health care team if a family member has ever had a blood clot in the past.
• Talk to your health care team about your risk factors (listed on page 5).
• Tell your health care team that you would like to prevent blood clots.

If you are in hospital:

• Tell your health care team if you have any signs or symptoms of a blood clot right away (see page 6).
• Ask your doctor or nurse, “What is being done to lower my risk of getting a blood clot?”
• Take the anticoagulant or “blood-thinning” medication if given to you. This will lower the chance of abnormal clotting of blood in your veins.
• Drink plenty of fluids, but check with your nurse first to make sure that this is right for you.
  • If you just had surgery, you may be getting fluids through your intravenous (IV). Check with your nurse to see how much fluid you can drink by mouth.
• Move your legs often and, walk as soon as your health care team says it is safe to do so.
**Leg exercises**
Do these exercises when you are lying in bed and, especially when you are sitting in a chair.

1. Push your toes down towards the foot of the bed.
2. Relax your feet.
3. Pull your toes up towards your chin.
4. Relax your feet.
5. Move your ankles in a circle. Do this in each direction.
6. Rest briefly, and then repeat steps 1 through 5.

Repeat these exercises 10 times every hour while awake. Do these exercises until you can walk and move around as normal. Once your condition is stable, your family can help you walk.

**Leg slides**

1. Lying on your back, slide legs up and down bending your knees.
2. Repeat one leg at a time, with your heel slightly off the bed.
3. Repeat 5 to 10 times every hour.
You can watch a video of these exercises online.

- Go to [www.uhnpatienteducation.ca](http://www.uhnpatienteducation.ca) and select “List of Videos” on upper right side of site. Then, scroll down the list to “Leg exercises”.
- If you are a surgery patient, these exercises can also be found in your “My Surgery” binder in the “After my Surgery” section.

**Other ways I can help prevent a blood clot**

- Stay as active as possible
- Don’t smoke or, stop smoking if you do
- Maintain a healthy body weight
- Take your medication (“blood thinners” or anticoagulants) to prevent blood clots as given to you by your health care team

**Where can I find more information about DVT and PE?**

Please talk to your health care team about any questions or concerns that you may have.

**Information on the Internet**

- [Thrombosis Canada](http://www.thrombosis.ca)
- [North American Thrombosis Forum (NATF)](http://www.natf.org)
- [ClotCare](http://www.clotcare.org)
- [National Alliance for Thrombosis and Thrombophilia (National Blood Clot Alliance)](http://www.clinicalthrombosis.com)
- [The American Venous Forum](http://www.venousforum.org)
Questions

Parts of this brochure have been adapted with permission from:
• National Institutes of Health (NIH)
• National “Stop the Clot” Alliance

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Visit www.uhnpatienteducation.ca for more health information.

Contact us to provide feedback or request this brochure in a different format, such as large print or electronic formats: pfep@uhn.ca

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